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# THE ANCIENT MAN OF CALAVERAS.

BY W. O. AYRES.

IN the minds of almost all, the existence of prehistoric man in California is associated mainly with the famous "Calaveras skull," and inasmuch as doubt has been cast on the authenticity of that relic, the whole subject has been badly neglected, and even by men of science has been unreasonably set aside. We will speak of that skull presently, but it is only one of the many evidences to be considered, and we will at first put it out of view. We shall find that if it had never come to light at all, the proofs that man existed when, or rather before, the auriferous gravel was deposited, are so complete that he who doubts them would as readily doubt that Napoleon Bonaparte died on the Island of St. Helena.

The auriferous gravel of the books is the pay-dirt of the miners, and that we may know what the existence of man at the time of its deposit means, we must endeavor to ascertain how long ago that deposit occurred. If we say to a geologist that the gravel is of Pliocene age, he carries back his thoughts over an interval of which the years reckoned by thousands are never counted, though he knows the thousand must be very many. But for those to whom Pliocene and Post-pliocene sound like barbarous terms it may be possible to adduce a form of proof which appeals to the eye, and which brings with it therefore, a force which all can appreciate.

It is well to state at the outset that the pay-dirt is manifestly all of one formation and of one geological age, wherever we find it. Some of it is lying opened and exposed; we will let that pass. Some of it is covered by volcanic rock, and of course is itself older than the rock; that is, the lava flowed out and covered the gravel after the gravel was in its present form and position. That is sure, for after the gravel was thus imbedded, it has most certainly never been disturbed until within these last few years the miners have dug into it in search of gold. To the gravel then below the lava, we will turn our attention.

Looking out from Carson hill, in Calaveras county, you see across the Stanislas in Tuolumne, a long mountain ridge. It extends down into the plain, where it ends very abruptly, while its upper limit is out of sight away among the main heights of the Sierra Nevada. It looks like a huge railroad embankment, and suggests to you that idea, but men do not make railroad dykes forty miles long and 1500 to 3000 feet high. That which gives it its smooth even upper surface is basalt, that is, ancient lava; the lower part is of looser materials. The thickness of the basalt varies at different points, being here and there hundreds of feet thicker than it is at other places a mile or two either above or below. This is Table mountain, a name which has been famous in the history of California, as we shall see.

The question occurs to us: How came Table mountain to exist? That basalt, when it was erupted, was fluid like other lava. How could it be piled up so thick and so abrupt (for its sides are often perpendicular) on that high mountain ridge, and remain there? Why did it not spread itself out laterally and cover the plain? But one answer to these questions can be given: *There was no plain.*

When that eruption took place, and the crater or fissure opened, far up near the summit of the Sierra Nevada, it naturally flowed into the bed of the first stream which crossed its track. This it filled and followed down until, when the eruption ended, the old river bed, away down to the plain, was blocked up by the solid volcanic rock, and the waters which should have been there, were finding their way by some other track.

As time passed on, the side of the mountain range was yielding to atmospheric influences. The flowing water was carrying off the softer material on each side of the hard basalt, which had filled and obliterated the old river-bed; the Tuolumne river on the south and the Stanislas on the north, with their tributaries, were formed, and scooped out their present valleys, and thus Table mountain, which had been deposited in the bed of an old mountain torrent, with high ridges confining it, became itself a ridge, standing like a wall above all which adjoined it. But beneath the basalt lay the stones and gravel and sand and clay which made the bed of the ancient torrent, as they do of the modern streams. And like the modern streams, their predecessor, in age but not in locality, was rich in gold, and thanks to this gold, we know something of the Ancient Man of Calaveras and Tuolumne. We know him because he has left his mark among the stones and gravel.

In what are called the "early days" in '49 and '50, the southern mines were specially noted and productive. Don Pedro's bar and Hawkin's bar on the Tuolumne were crowded with miners, and all the region about Sonora, and Columbia, and Shaw's flat, was swarming like a hive. The gold which was obtained had been brought down in company with the gravel from the mountain heights far above, by the rush of water, ages before. Wherever an old channel could be found in which the flow of water had been confined to narrow limits and to whirling eddies, there the gold had been deposited more abundantly, and rich strikes were made. While exploring these surface deposits, an old river-bed was struck at Shaw's flat, in 1854, which showed features quite distinct from the "diggings" adjacent, and in following out this discovery it became manifest that Table mountain, as already stated, was simply a mass of lava filling an ancient torrent cañon, and that the gravel thus buried was in various places most wonderfully rich. This was the beginning of Table mountain mining.

The whole matter had very much the character of a lottery, for the expense of running a tunnel under the mountain was very great, and the result entirely uncertain, commonly rich to even a fabulous degree, or on the contrary a total failure. The failures were many and the losses destructive to the fortunes of the men interested, but the wild excitement of golden possibilities lured multitudes along, and for years and years in succession Table mountain was bored and tunneled most completely. It is not for us now to speak of the triumph or the heart-ache which went with the work; we know well that

"No minstrel ever sung or told
A song so sweet as chink of gold,"

and nowhere, even in that land of enchantment, was the wild and fatal fascination of the search more fully felt than at Table mountain. But that goes by us. Out of these tunnels came the tokens of the past, and we see shadowy visions of the ancient man looming up.

But we will first try to measure off the interval since the Table mountain lava flowed; not that we can specify it in figures, but we may learn enough to reverence its extent. We will consider but one feature. This is the magnitude of the work which has been done by streams of water since the period of volcanic eruption of which mention has been made.

The western slope of the Sierra Nevada is furrowed with enormous gorges reaching from the summit ridges to the plains of the Sacramento and the San Joaquim. Any one of them may be taken as a type of all the others. At their upper part they are, of course, shallow and narrow; a few hundred feet deep and a quarter to half a mile wide, more or less, but steadily increasing in both dimensions. Before they reach their debouchure they are ten to twenty miles wide and two to four thousand feet deep. Standing far up among the higher ranges and following with the eye the stupendous furrow through its windings, fifteen, thirty, forty miles, till all is lost in the blueness of depth and of distance, one often tries to roll back the tide of time and get some glimpse of the days when that plowshare began its work. But the blueness of the chasm is only a faint index of the dimness which comes across the mental vision. It is idle to suggest to one thus standing and looking down the cañon of the Yuba, or the American, or the Tuolumne, that water can have done that work (and water certainly has done it) within an interval which, reckoning years by thousands, must not have written against it *very, very many.* We will not specify how many, but the number surely is great.

And all this scooping out of cañons, this furrowing the western Sierra slope into its configuration of the present era, has been done since the Table mountain lava flowed. Of that there can be no question. The evidence is too plain to admit a doubt.

If now we find the remains of man, or works which none but man could have made, among the gravel-beds beneath Table mountain, or in any other place amid the undisturbed pay-dirt, we cannot fail to know that human hands and human brains had done their work before the immense cañons of the Sierra Nevada commenced their formation in the little furrows near the summit down which the waters trickled.

We can take the proofs only in brief, and we will take none but those which are absolutely established and authentic.

Dr. Perez Snell, of Sonora, had in his collection (this collection has unfortunately perished by fire) a human jaw which was brought out in a carload of "pay-dirt" from a shaft stretching far in beneath the Table mountain, and with it were several stone implements. Dr. Snell did not himself see this bone in the car as it was drawn to the surface, and in the minds of some a doubt might thus be thrown on its authenticity. The specimen was given to him by a miner. If it were an isolated instance this would be possibly worth considering, but it is only one of many, and at the same time it is only fair to state that there could not well have been found a miner in all that region who would have thought it worth his while to attempt a deception, nor even one who had any doubt in his own mind as to the point we are considering. They saw the products of man's work come out with the gravel too often to pay commonly any attention to them. The only wonder is that he even took the trouble to pick out the bone at all. There can be no question that for one such that has been preserved, dozens and perhaps hundreds have gone down in the current of water in the sluice washing.

In 1857 Col. Hubbs, who was afterward State Superintendent of Instruction, found in a load of "dirt" as it came out from his claim under Table mountain, portions of a human skull. He was on the ground himself, and saw the fragments as they were taken out of the sluice. They had come from a distance of 180 feet beneath the lava. One of the pieces is now in the collection of the Boston Society of Natural History; the other in that of the Philadelphia Academy.

Mr. O. W. Stevens certifies that in 1853 he found in a shaft under Table mountain, "about two hundred feet in," a relic that resembled a large stone bead, of white marble, about an inch and a half long and an inch and a fourth in diameter, with a hole through it a fourth of an inch across.

Dr. Snell had in his collection a stone muller or pestle which he took with his own hands from a car load of "dirt" as it came out from under Table mountain.

Mr. Llewellyn Price certifies that in 1862 he dug up a stone mortar under Table mountain at a depth of about 200 feet from the surface and about 1800 feet in from the mouth of the tunnel.

But why need we specify any further single instances. The witnesses already given were all credible and worthy men, they could have had no possible collusion, they had no motive for deception, and the circumstances were such that they could not well be deceived as to what they stated. If any candid person will not be convinced by the evidence they give, he would be equally incredulous were a hundred more to testify to the same truths.

And the hundred more could be summoned were it worth the while, for the instances in which the products of human workmanship have been washed out of the "gravel" in searching for gold are altogether too numerous for record. Very many of them are now in the Museum of the University of California, and very many more were disregarded and lost, for so common did they become during the days of surface mining, that at length the miners paid no attention to them, and they simply went in with the refuse of the workings.

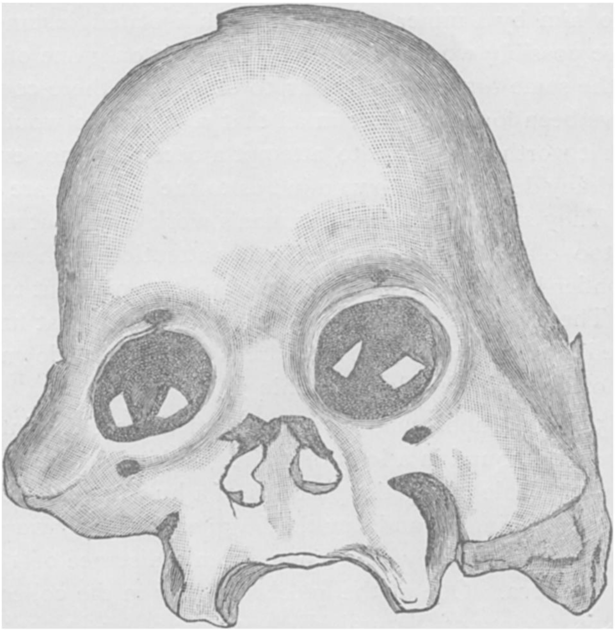

FIG. 1.—Calaveras Skull, Front View.

They were almost universally implements of stone, such as mortars, pestles, rude vases or platters, that is, articles which could be used for grinding food, &c., but all rough in workmanship and evidently fabricated by people low in the scale of civilization. But such as they are, they show with what appears to be conclusive proof, that they were made before Table mountain lava was erupted, and perhaps long before, for they were also surely made before the auriferous gravels were deposited.

One item comes naturally to our consideration here in the line of confirmation. The auriferous gravels contain abundant remains of plants and animals. Mastodons and elephants appear to have specially abounded; in no other part of the world have their bones and teeth been found in greater numbers. With them were found species of rhinoceros, Elotherium, horse, ox, camel, &c., &c. But all of these were of types long since passed away, and the same can be said of the leaves and fossilized wood. Dr. Newberry's report characterizes them as being entirely unlike anything now growing in California, and as belonging to the Tertiary age, the later Pliocene. Now we know that the fauna and flora of a country cannot be *completely* changed except through the intervention of a very great space in time, or the agency of a sudden cataclysm and reconstruction.

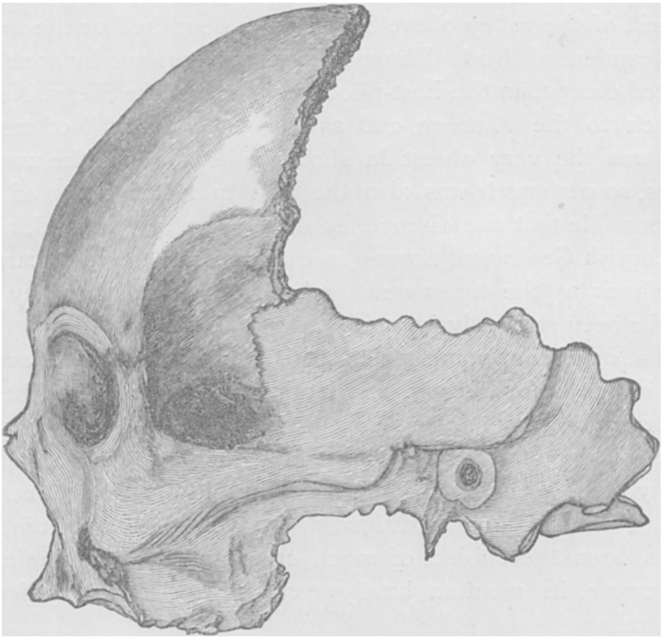

FIG. 2.—Calaveras Skull, Profile View.

And shall we now compare them in age with the others which are absolutely prehistoric, and which have disturbed the scientific world by their venerable antiquity. Fierce have been the conflicts waged over the Neanderthal skull, the Engis skull, the men of Cro-Magnon and the various other relics gathered from the gravels and bone-breccias of Europe. But their record is dwarfed to comparative insignificance when laid by the side of that to which we have been looking. The days of Table mountain had passed off into the dark realm of the forgotten past, ages before the drift of the valley of the Somme was deposited or the man of the Neanderthal lived. Those European relics have by none been counted older than the Post-pliocene; these of the Sierra Nevada go back to the Pliocene, and as the "new world" of modern style was the very oldest in showing itself above the waste of waters, so perhaps it was also the first to feel the step of man. It is possible that the discoveries of Ribiero in Portugal, and of the English Geological Survey in India may be found to carry us as far back as the times we have been discussing, but they have thus far been strangely ignored.

What manner of man then was this Ancient Man of Calaveras? Let him speak for himself. All notice of the skull described by Professor Whitney has been purposely omitted till this moment, because it is by far the most important "find" yet made, and it is worthy of being considered by itself and in the present connection. The chief point in estimating its value, is its genuineness. It has been the subject of much criticism, and in the minds of very many, its mention barely recalls Bret Harte's ridiculous doggerel,

> "My name it was Brown, and my crust it was busted
> Falling down a shaft in Calaveras county,"

and the request to send the pieces back to old Mazzoura, has relegated the whole matter to the domain of joke. In the belief that Professor Whitney was the victim of a *sell*, the question is often asked whether there is any evidence that the skull was actually taken from the shaft to which its discovery is credited.

Now with all due submission to previous judgment (or misjudgment), I maintain that that question is of only secondary importance. The skull speaks for itself, and notwithstanding that its lower jaw is gone, it talks good English, whatever its vernacular may have been in the days of the flesh.

That it came to Professor Whitney from the hands of Mr. Mattison (or as I always heard him called, Matthewson), of Angels Camp, is certain. Where did Mr. Matthewson get that skull? I do not know, nor is the precise spot of much consequence. He says he took it from his shaft near what was then called the Forks of the Road, above Angels. Suppose he did, or suppose he foolishly tried to humbug the geologist, what does it matter? He got the skull *somewhere*, and wherever it might have been first found, it surely was imbedded in the auriferous gravel, and it had become so imbedded at the time the gravel was originally deposited.

You say, that is a bold assertion; how do you know it? I will tell you; I know it, because *the skull told me so.* I saw it and examined it carefully at the time when it first reached Professor Whitney's hands. It was not only incrusted with sand and gravel, but its cavities were crowded with the same material; and that material was of a peculiar sort, a sort which I had had occasion to know thoroughly. It was the the common "cement" or "dirt" of the miners; that known in books as the auriferous gravel. This is an article "*sui generis*;" it is not easily imitated. No skill possessed by Mr. Matthewson or any one else could have been sufficient to give the skull the characters which it had as I saw it. It is most certainly no fabrication.

But it has been said that it is a modern skull which had become incrusted after a few years of interment. This assertion, however, is never made by any one knowing the region. The gravel has not the slightest tendency toward an action of that sort. The skull would either decay and waste away, or it would remain unchanged; and added to this comes in the fact that the hollows of the skull were crowded with the solidified and cemented sand, in such a way as they could have been only by its being driven into them in a semi-fluid mass, a condition which the gravels have never had since they were first laid down.

No, no! Let the skull tell its own story, and believe what it says, because it brings its own proof. Whatever age belongs to the gravel deposit under Table mountain belongs to the Calaveras skull, entirely irrespective of the question of honesty or dishonesty in the alleged finder. Wherever he found it, I believe its age to be beyond cavil.

Its degree of fossilization has not been here insisted upon, because that change is more rapid in some localities than in others, but it is an interesting fact that this Calaveras skull is more thoroughly fossilized, a greater proportion of its phosphate of lime has become carbonate than in either of the European specimens which are reckoned of the greatest age.

We seem then fairly entitled to consider the Ancient Man of Calaveras the oldest representative of our race to which we can as yet refer; and being such, is he of a bestial type? Look for yourself. Figures have been published by Professor Whitney in his work. What is there bestial as shown by them? A single skull cannot, of course, speak for a whole race, but so far as this specimen can testify, what man is now, man was then. It manifests no sign of inferiority to the American race as now existing. Barbarous in habit he doubtless may have been.. All the relics of workmanship thus far discovered of those coeval with him, indicate a low grade of civilization, and yet one not necessarily much, if at all, lower than that of most of the Indian tribes which formerly occupied the entire breadth of the continent. And in intellectual power, judging from his cerebral development, he might assuredly have claimed a fair average rank.

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# THE GRAY RABBIT (LEPUS SYLVATICUS).

BY SAMUEL LOCKWOOD.

A BIT of odd, yet attractive innocence is the wild rabbit of Europe. I cannot say as much for its descendant, that piebald and lop-eared pet of my boyhood. All endearment died out at sight of the pampered old buck killing his own offspring from sheer wantonness; then came implacable dislike on seeing the doe eating one of her little babies. The domesticated rabbit gains nothing intellectually over its wild ancestor, but becomes emotionally unnatural, if not pathologically unsound. The tamed gray squirrel will lose the sexual instinct to the extent that it becomes degenerated into or absorbed by a morbid appetite so engrossing that the male will suck at one place on the tail of his mate, until he has nearly severed that member. Something not unlike is seen in the stallion of high strain, when biting the neck of the mare in the fervency of his passion. At the best, under domestication, the rabbit, like the guinea pig, *Cavia cobaia*, with its rabbit-like head and face, gets simply coddled into a